ABSTRACT OF THE DISCLOSURE

FACE DETECTION

5   Face detection apparatus generating an output indicative of the likelihood of test regions of a test image containing a face comprises: means for deriving a plurality of sets of image attribute data from the test region, each set relating to the test region scaled by a respective different scaling factor from a geometric progression of scaling factors, the progression being such that each scaling factor is related to a next scaling factor by a

10   predetermined multiplicative factor, the factor being the same across the whole progression of scaling factors; means for comparing the derived attributes for each scaling factor with a first respective set of attributes indicative of the presence of a face to generate a first respective likelihood value; means for comparing the derived attributes for each scaling factor with a second respective set of attributes indicative of the presence of a face to

15   generate a second respective likelihood value; means for generating a combined likelihood value in respect of at least a subset of the scaling factors by combining the first likelihood value applicable to that scaling factor with the second likelihood value applicable to a further scaling factor separated from that scaling factor in the geometric progression by a predetermined number of positions; and means for deriving a probability of the presence of a

20   face at each scaling factor in the subset by a similarity between the derived attributes and the combined likelihood value in respect of that scaling factor.

Figures 13a to 13c.